

## A NEW SPECIES OF THE GENUS MACROPHYA DAHLBOM FROM CHINA (HYMENOPTERA, TENTHREDINIDAE)

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**Abstract** A new species, *Macrophya acuminiclypeus* sp. nov., is described from Fujian, Jiangxi and Hunan Provinces, China. It is similar to *Macrophya ligustri* Wei et Huang, but can be easily recognized from the latter by clypeus deeply incised with lateral lobes long and narrow, punctures on frons and mesepisternum large and dense, middle furrow of prescutum faint and nearly absent, the basal 1/4 of hind coxa pale yellow, the middle serrulae oblique and each with 10–11 subbasal teeth. Type specimens are deposited in the Insect Collection of Central South Forestry University, Changsha, China.

**Key words** Hymenoptera, Tenthredinidae, *Macrophya*, new species, China.

*Macrophya* Dahlbom is one of the largest genera in the family Tenthredinidae, Hymenoptera, and about 230 valid species have been described in the world. All species of the genus are found in the Northern Hemisphere and most of them are distributed in the Palaearctic and Oriental Regions. About 77 species of the genus have been recorded in China and 60 species were described by Wei and his group (Wei and Ma, 1997; Wei and Nie, 1995, 1998, 1999a, 1999b, 2002a, 2002b, 2003; Wei and Chen, 2002; Liu and Wei, 2005; Chen and Wei, 2002; Chen et al., 2005; Wei and Xiao, 2005; Wei and Lin, 2006; Wei, 2006). Based on the specimens in the Insect Collection of Central South Forestry University, it seems that there would be more than 100 species of *Macrophya* in China. A new species is described and illustrated in the present paper, which was collected from Jiangxi, Hunan and Fujian Provinces. Type specimens are deposited in the Insect Collection of Central South Forestry University, Changsha, China.

*Macrophya acuminiclypeus* sp. nov. (Figs 1–3)

♀. Body length 9.5 mm; black, following parts pale yellow: labrum, clypeus, basal half of each mandible, greater part of palpi, narrow hind margin of postocellar area, two large spots on anterior part of pronotum, hind margin and lateral lobes of pronotum largely, outer half of tegula, most of mesoscutellum, metascutellum, lateral sides and broad posterior margin of 1st abdominal tergite, broad lateral sides

and posterior margins in outer 2/5 of tergites 2–5, narrow posterior margin of tergite 6, a triangular spot on each of posterior part of tergites 7–9, tergite 10 entirely, apical 2/5 of each coxa, trochanters, fore and middle tarsi except apical margins, a stripe on dorsal part and apex of anterior side of fore femur, larger part of fore tibia, basal and apical 1/5 of middle femur, apical 2/5 of middle tibia, a big and ovate spot on outer side of hind coxa, basal 1/4 of hind femur, apical 1/3 dorsally of hind tibia. Body hairs silvery ventrally and greyish dorsally, hairs on sheath brown. Wings hyaline, slightly infuscate, stigma and costal vein brownish black (Fig. 1).

Body robust; clypeus deeply incised up to more than half length of clypeus with bottom truncate, lateral lobes long and narrow; labrum large and subquadrate, distinctly convex centrally (Fig. 2); hairs on labrum and clypeus long and about 2 times as long as diameter of median ocellus; eyes large with inner margins distinctly convergent downwards, distance between eyes below narrower than height of an eye and as broad as clypeus; malar space equal to radius of median ocellus; middle fovea wide and shallow, lateral fovea short and straight, open anteriorly and posteriorly; frons wide and flat, frontal ridge obtuse; interocellar and postocellar furrows fine and shallow, circular furrow of anterior ocellus fine and indistinct; postocellar area elevated and not higher than ocellus, broader than long as 5:2, lateral furrows short and deep, distinctly divergent backwards; head

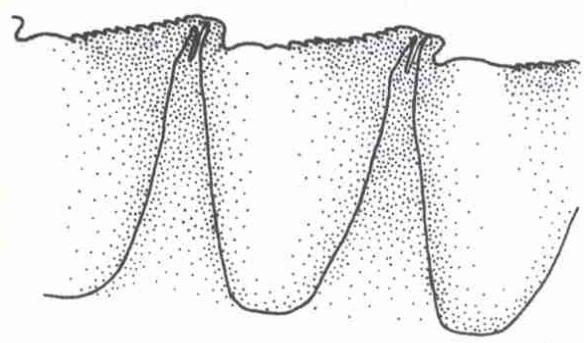
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in dorsal view distinctly narrowed behind eyes and about 1/4 length of eye. Antenna filiform, slightly longer than head and thorax together, 3<sup>rd</sup> segment distinctly shorter than 4<sup>th</sup> and 5<sup>th</sup> segments together and 1.25 times larger than 4<sup>th</sup> one, middle flagellar segments hardly dilated, apical four segments indistinctly reduced. Frons and most part of inner orbits with dense and rough punctures, shining, postocellar area and inner part of temple sparsely punctured and strongly shining; punctures on dorsal part of pronotum and larger part of scutum dense and rough, interspaces between punctures polished, slightly shining; metanotum with indistinct punctures and few microsculptures; punctures on anterior part of mesoscutellum large but sparse, strongly shining; posterior part of mesoscutellum and appendage densely and minutely punctured, slightly shining; punctures on upper part of mesepisternum large and dense, on lower part of mesepisternum rather minute; mesepimeron with indistinct punctures and dense microsculptures; metepisternum densely and minutely punctured, slightly shining. Middle furrow of prescutum faint, nearly absent; middle part of

mesoscutellum distinctly elevated and as high as mesonotum, posttergite with low and blunt middle carina; cencrus triangular, OD=3; middle part of mesepisternum weakly elevated; posterior corner of metepimeron rounded and not elongated, without appendage. Inner fore tibial spur slightly shorter than outer one and longer than 1/2 length of basitarsus, basitarsus longer than following 4 tarsomeres together; claw without basal lobe, inner tooth large and as long as outer one. Fore wing with  $r_4 + m$  joining cell 1M at basal 1/4, 2r joining cell 2Rs at apical 2/5, anal cell without cross vein but with a middle petiole about as long as vein Sc; lower outer corner of cell 2Rs acute. Hind wing with 2 closed middle cell (Rs, M), anal cell with petiole which about as long as 1/3 length of vein  $r_4 + m$ . Larger part of abdominal tergite 1 polished and without punctures, only lateral part with some shallow punctures, strongly shining; other tergites densely and minutely punctured, slightly shining. Sheath slightly shorter than hind basitarsus, oblong plate subequal to sheath; sheath with long and curly hairs. Lancet with 22 annuli, serrulae slightly elevated and oblique, 10<sup>th</sup> to 11<sup>th</sup> serrulae as in Fig. 3, middle



Figs. 1-3. *Macrophya acuminiclypeus* sp. nov. 1. Adult female. 2. Head in front view. 3. The 10<sup>th</sup>-11<sup>th</sup> serrulae.

serrulae each with 10-11 posterior subbasal teeth.

♂ unknown.

Holotype ♀, Luxi (27°6' N, 113°85' E), Pingxiang, Jiangxi Province, China, 3 Apr. 2004, WEI Mei-Cai. Paratypes: 1 ♀, Liuyang, Hunan Province, China, 5 May 1985, TONG Xin Wang; 1 ♀, Mt. Wuyi, Fujian Province, China, 1100 m, 20 May 2004, ZHOU Hu.

Distribution. China (Jiangxi, Hunan, Fujian).

Remarks. This species is similar to *Macrophya ligustri* Wei et Huang, 1997, but can be easily recognized from the latter in: clypeus deeply incised with lateral lobes long and narrow, punctures on frons and mesepisternum large and dense, median suture on the prescutum indistinct, middle part of mesoscutellum distinctly elevated, basal 1/3 of hind coxa pale yellow, the middle serrulae oblique and each with 10-11 posterior subbasal teeth.

Etymology. The specific epithet is derived from the Latin words “*acuminor*” and “*dypeus*”, indicating lateral lobes of clypeus in the new species long and narrow, and acute at its apex. It is to be treated as a noun.

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## 中国钩瓣叶蜂属一新种(膜翅目, 叶蜂科)

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**摘要** 钩瓣叶蜂属隶属于叶蜂科, 已知230余种, 中国已经报道77种。记述中国钩瓣叶蜂属1新种: 尖唇钩瓣叶蜂 *Macrophya acuminiclypeus* sp. nov., 该种与女贞钩瓣叶蜂 *M. ligustri* Wei et Huang, 1997近似, 但唇基缺口深, 侧角狭长, 端部尖, 头部额区和中胸侧板刻点粗密, 中胸背板前叶中沟模糊, 几乎消失, 后足股节基部1/4黄白色, 锯腹片22

**关键词** 膜翅目, 叶蜂科, 钩瓣叶蜂属, 新种, 中国。

中图分类号 Q969.542.6

刃, 中部锯刃具10~11个后位亚基齿等, 差别明显, 易于鉴别。正模♀, 江西萍乡芦溪, 2004-04-03, 魏美才采; 副模: 1♀, 湖南浏阳, 1985-05-08, 童新旺; 1♀, 福建武夷山, 1100 m, 2004-05-20, 周虎。新种模式标本保存于中南林业科技大学昆虫模式标本室。